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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,278	01/25/2005	Masao Tanaka	103213-00105	1702

4372 7590 03/28/2007  
ARENT FOX PLLC  
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WASHINGTON, DC 20036

EXAMINER
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LIVEDALEN, BRIAN J

ART UNIT	PAPER NUMBER
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2878

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/28/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/520,278

Applicant(s)

TANAKA ET AL.

Examiner

Brian J. Livedalen

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/2006 has been entered.

Claims 1- 9 are pending.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Merrick et al. (4863806).

In regard to claim 1, Merrick discloses (fig. 7) a leadframe having an element mount frame (fig. 6, 99), a fitting frame (21) that is laid beside the element mount frame with a gap left in between, and a shielding frame (95) that is tied via a tying portion (31) to the fitting frame and that can be brought into such a state as to cover the element mount frame by bending the tying portion, wherein the fitting frame is positioned between the shielding frame and the element mount frame (column 3, lines 23-46).

In regard to claim 2, Merrick discloses (fig. 6) wherein tie bars (3, 5) are provided at both ends of the gap.

In regard to claim 3, Merrick discloses (fig. 6) that the element mount frame and the fitting frame are separate.

In regard to claim 4, Merrick discloses (fig. 6) that the fitting frame is in a portion near the tying portion, shaped symmetrically about the tying portion.

Claims 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Aird (4446375).

In regard to claim 5, Aird discloses (fig. 2) a photodetector module having a photodetector element (fig. 1, 20), an element mount frame (36) on which the photodetector is mounted, a fitting frame (100) that is laid beside the element mount frame with a gap left in between, and a shielding frame (26) that is tied via a tying portion (90A) to the fitting frame and that can be brought into such a state as to cover the element mount frame by bending the tying portion, and molding resin (fig. 1, 12) in which the element mount frame and the fitting frame are sealed, wherein the fitting frame is positioned between the shielding frame and the element mount frame (column 3, lines 35-45, column 4, lines 50-59, column 6, lines 11-20).

In regard to claim 9, Aird discloses (fig. 2) that the element mount frame and the gap have nearly equal lengths.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aird (4446375) as applied to claim 5, and in view of Nishimura (2003/0121437).

In regard to claim 6, Aird discloses a photodetector module as set forth above. Aird fails to disclose the mount frame and the shielding frame are kept at the same potential. However, Nishimura discloses (fig. 8) a photodetector module with a shield and mount frame with equal potentials (page 4, paragraph 0035). It would have been obvious to one of ordinary skill in the art at the time the invention was made to put the two frames of Aird at equal potential as taught by Nishimura to shield out the most noise (page 4, paragraph 0035).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aird (4446375) as applied to claim 5, and in view of Wyland et al. (5679975).

In regard to claim 7, Aird discloses a photodetector module as set forth above. Aird fails to disclose the mount frame and the shielding frame are kept at different potentials. However, Wyland discloses (fig. 2b) a photodetector module with a shield and mount frame with different potentials (column 2, lines 20-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to put the

two frames of Aird at different potentials as taught by Wyland in order to shield out the desired amount of noise.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aird (4446375) as applied to claim 5, and in view of Worley et al. (6885016).

In regard to claim 8, Aird discloses a photodetector module as set forth above. Aird fails to disclose a circuit element mounted on the mount frame. However, Worley discloses (fig. 3b) a similar photodetector module with a photodetector (312) on a mount frame as well as an integrated circuit (307) on the mount frame (column 6, lines 20-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Aird to include an integrated circuit with the photodetector in order to make the system more compact and to eliminate noise by providing the same shielding to the circuit.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Livedalen whose telephone number is (571) 272-2715. The examiner can normally be reached on 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



THANH X. LUU  
PRIMARY EXAMINER

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